What is claimed is:

1. A solvent for extracting oil from an oil bearing material so as to form an extracted oil comprised of greater than 95% by weight triglycerides and other non-polar constituents, with said solvent having a polarity no greater than about 0 and a viscosity ranging between about 0.3 centipoise and about 2.6 centipoise, whereby the triglycerides are miscible in said solvent at a temperature ranging between about 35° C and about 55° C and after extraction of the triglycerides said solvent and the triglycerides form a miscella at a temperature ranging between about 15° C and about 25° C, said miscella will form distinct solvent and oil layers that can be separated, said solvent comprising:

(a) an amount of a low molecular weight hydrocarbon having a viscosity of less than 2.6 centipoise; and,

(b) a fluorocarbon solvent.

2. The solvent of claim 1 wherein said hydrocarbon is of the formula $C_nH_{(2n+2)}$ or C_nH_{2n} with n equal to between 5 and 8.

3. The solvent of claim 2 wherein said hydrocarbon is a hexane.

4. The solvent of claim 1 wherein said fluorocarbon has a polarity index of less than 0.1.

5. The solvent of claim 4 wherein said fluorocarbon has a polarity index ranging between about - 2.0 and about 0.1 and a dielectric constant ranging between about 1.7 and about 2.0.

6. The solvent of claim 1 wherein said extracted oil is comprised of at least 99% by weight triglycerides and other non-polar constituents.

7. The solvent of claim 1 wherein the oil bearing material is selected from the group consisting of soybean, corn, cotton seed, olive, peanut, linseed, and coconut material.

8. The solvent of claim 7 wherein the soybeans are flaked to a length equal to about 10 mm.

9. The solvent of claim 3 wherein said hexane is selected from the group consisting of straight-chained hexanes, branch-chained hexanes, and mixtures thereof.

10. The solvent of claim 1 wherein said fluorocarbon solvent is selected from the group consisting of $C_nH_{(2n+2)-x}F_x$, where n equals between 4-8 and x equals between 1-17; $C_nF_{(2n+2)}$, where n equals between 5-8; $C_nCl_{(2n+2)-x}F_x$, where n equals between 1-6 and x equals between 1-13; $C_nH_{(2n+2)-(x+f)}Cl_xF_f$, where n equals between 1-4, x equals between 1-9, and f equals between 1-9; and, $C_nH_{(2n+2)-x}Cl_x$, where n equals between 1-4, and x equals between 1-9.

11. The solvent of claim 10 wherein said fluorocarbon solvent is selected from the group consisting of: $C_5H_5F_{10}$, C_6HF_{13}, C_7HF_{15}, $C_{10}HF_{21}$, C_8H_8F, C_5F_{12}, C_7F_{16}, C_6F_{14}, C_8F_{18}, $C_2Cl_3F_3$, CCl_3F, $C_3Cl_2F_6$, $C_4Cl_2F_8$, $C_4Cl_3F_7$, C_6ClF_{13}, $C_3HCl_2F_5$, $C_2HCl_2F_3$, CH_2Cl_2, $C_2H_3Cl_3$, and C_2HCl_3.

12. The solvent of claim 1 wherein said fluorocarbon solvent is selected from the group consisting of hydrofluorocarbon, perfluorocarbon, hydrochlorofluorocarbon, and combinations thereof.

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13. The solvent of claim 1 wherein said fluorocarbon is a hydrofluorocarbon.

14. The solvent of claim 1 wherein said fluorocarbon solvent is equal to between 60% and 70% by volume of said solvent.

15. A solvent for extracting soybean oil from soybeans so that an extracted soybean oil is obtained comprised of at least 95% by weight triglycerides, said solvent comprising:

a. an amount of hexane; and,

b. an amount of fluorocarbon, with said fluorocarbon added in an amount equal to about 60% to 70% by volume of said total solvent.

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16. A solvent for extracting oil from an oil bearing material so as to form an extracted oil comprised of greater than 95% by weight non-polar constituents, with said solvent having a polarity no greater than about 0 and a viscosity less than about 2.6 centipoise, whereby the non-polar constituents are miscible in said solvent and after extraction of the non-polar constituents, said solvent and the non-polar constituents form a miscella, said solvent comprising:

(a) an amount of a low molecular weight hydrocarbon; and,

(b) a non-polar halogenated solvent.

17. A method of using a fluorocarbon to extract oil from an oil bearing material, said method comprising:

(a) contacting the oil bearing material with an amount of a fluorocarbon solvent to form a miscella whereby the oil is miscible in said solvent, wherein said fluorocarbon solvent is comprised of a hydrocarbon and said fluorocarbon, with said fluorocarbon added in an amount sufficient to cause said solvent to have a polarity equal to or less than 0;

(b) separating said miscella from the oil bearing material;

(c) cooling said miscella to a temperature sufficient to form distinct oil and solvent layers; and,

(d) treating said layers so as to separate said oil from said solvent.

18. The method of claim 17 wherein said fluorocarbon is of a formula equal to $C_nH_{(2n+2)-x}F_x$, where n equals between 4-8 and x equals between 1-17; $C_nF_{(2n+2)}$, where n equals between 5-8; $C_nCl_{(2n+2)-x}F_x$, where n equals between 1-6 and x equals between 1-13; $C_nH_{(2n+2)-(x+f)}Cl_xF_f$, where n equals between 1-4, x equals between 1-9, and f equals between 1-9; and, $C_nH_{(2n+2)-x}Cl_x$, where n equals between 1-4, and x equals between 1-9.

19. The method of claim 17 wherein said fluorocarbon is a hydrofluorocarbon.

20. The method of claim 17 wherein said hydrocarbon is a hexane.

21. The method of claim 17 wherein said miscella is cooled to a temperature ranging between about 15° C and about 25° C.

22. The method of claim 17 wherein said solvent and the oil bearing material are contacted at a temperature ranging between about 35° C and about 55° C.

23. A method for extracting oil from an oil bearing material so as to form an oil product comprised of greater than 95% triglycerides and other non-polar constituents, said method comprising:

(a) forming a solvent comprised of an amount of a low molecular weight hydrocarbon having a viscosity of less than 2.6 centipoise and a non-polar fluorocarbon, with said solvent having a polarity no greater than about 0 and a viscosity ranging between about 0.3 and about 2.6 centipoise;

(b) contacting said solvent with the oil bearing material at a temperature sufficient so that the triglycerides and the other non-polar constituents will be miscible in said solvent, for a time sufficient to extract an amount of oil found in the oil bearing material, thereby forming a miscella;

(c) separating said miscella from the oil bearing material;

(d) cooling said solvent and oil composition to a temperature sufficient to form distinct oil and solvent layers; and,

(e) separating said oil from said solvent.

24. The method of claim 23 wherein said fluorocarbon is selected from the group consisting of $C_nH_{(2n+2)-x}F_x$, where n equals between 4-8 and x equals between 1-17; $C_nF_{(2n+2)}$, where n equals between 5-8; $C_nCl_{(2n+2)-x}F_x$, where n equals between 1-6 and x equals between 1-13; $C_nH_{(2n+2)-(x+f)}Cl_xF_f$, where n equals between 1-4, x equals between 1-9, and f equals between 1-9; and, $C_nH_{(2n+2)-x}Cl_x$, where n equals between 1-4, and x equals between 1-9.

25. The method of claim 23 wherein said hydrocarbon is a hexane.

26. The method of claim 23 wherein the oil bearing materials are flaked soybeans.

27. The method of claim 23 whereby said temperature for contacting said solvent with the oil bearing material ranges between about 35° C and about 55° C.

28. The method of claim 23 wherein greater than 15% of the oil bearing material is extracted.

29. The method of claim 23 wherein said miscella is cooled to a temperature ranging between about 15° C and about 25° C.

30. The method of claim 24 wherein said fluorocarbon is selected from the group consisting of hydrofluorocarbon, perfluorocarbon, and hydrochlorofluorocarbon.

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